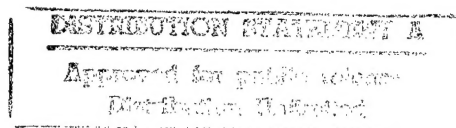


October 1997

DEFENSE TRADE

European Initiatives to
Integrate the Defense
Market

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United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-276450

October 29, 1997

The Honorable William S. Cohen
The Secretary of Defense

Dear Mr. Secretary:

With decreasing U.S. defense procurement budgets since the end of the Cold War, U.S. defense companies have been looking for sales in foreign markets, and the Department of Defense (DOD) has been attempting to increase cooperative programs with its major European allies. At the same time, partly in response to their own reduced defense budgets, many European countries have taken steps to develop a common armament policy and consolidate their defense industrial base to become more efficient and competitive in world markets. To provide some insights and perspective on the implications these European efforts have on future U.S. military procurement options, we have reviewed the changes that have taken place in the European defense market over the past 5 years. Specifically, our objectives were to examine (1) what actions European governments and industry have taken to unify the European defense market, (2) how key European countries' defense procurement practices have affected U.S. defense companies' ability to compete on major weapon competitions in Europe, and (3) how the U.S. government and industry have adapted their policies or practices to the changing European defense environment. Our review focused on the buying practices of five European countries—France, Germany, Italy, the Netherlands, and the United Kingdom.

Background

Global exports of defense equipment have decreased significantly since the end of the Cold War in the late 1980s. Major arms producing countries, such as the United States and those in Western Europe, have reduced their procurement of defense equipment by about one-quarter of 1986 levels based on constant dollars. Overall, European nations have decreased their defense research and development spending over the last 3 years, which is one-third of the relatively stable U.S. research and development funding. Defense exports have declined over 70 percent between 1987 and 1994. In response to decreased demand in the U.S. defense market, U.S. defense companies have consolidated, merged with other companies, or sold off their less profitable divisions, and they are seeking sales in international markets to make up lost revenue. These companies often compete with

European defense companies for sales in Europe and in other parts of the world.

The U.S. government, led by DOD, has maintained bilateral trade agreements with 21 of its allies, including most European countries, to address barriers to defense trade and international cooperation. No multilateral agreement exists on defense trade issues. Bilateral agreements have been established to provide a framework for discussions about opening defense markets with those countries as a way of improving the interoperability and standardization of equipment among North Atlantic Treaty Organization (NATO) allies. The United States has enjoyed a favorable balance of defense trade, which is still an issue of contention with some of the major arms producing countries in Europe.¹ This trade imbalance was cited in a 1990 U.S. government study as a justification for European governments requiring defense offsets.² However, because European investment in defense research and development is significantly below U.S. levels, a Department of Commerce official stated that European industry is at a competitive disadvantage in meeting future military performance requirements.

Reciprocal trade agreements recognize the need to develop and maintain an advanced technological capability for NATO and enhance equipment cooperation among the individual European member nations. A senior NATO official stated that Europe's ability to develop an independent security capability within NATO and meet its fair share of alliance obligations is contingent on its ability to consolidate its defense industrial base. This official indicated that if such a consolidation does not occur, then European governments may be less willing to meet their NATO obligations.

Results in Brief

Pressure to develop a unified European armament procurement policy and related industrial base is increasing, as most nations can no longer afford to develop and procure defense items solely from their own domestic companies. European governments have taken several initiatives to integrate the defense market, including the formation of two new

¹According to a DOD official, data showed that the balance of defense trade with Europe was about 2 to 1 in the U.S. favor. Although the accuracy of DOD's defense trade estimates has been questioned, alternative estimates support a U.S. trade advantage. See European Initiatives: Implications for U.S. Defense Trade and Cooperation (GAO/NSIAD-91-167, Apr. 4, 1991).

²Offsets are defined as the entire range of industrial and commercial compensation benefits provided to foreign governments and firms as inducements or conditions for the purchase of military goods and services.

organizations to improve armament cooperation. European government officials remain committed to cooperative programs, which have long been the impetus for cross-border defense cooperation at the industry level. Some European defense companies are initiating cross-border mergers that are not tied to government cooperative programs. Although some progress toward regionalization is occurring, European government and industry officials told us that national sovereignty issues and complex ownership structures may inhibit European defense consolidation from occurring to the extent that is needed to be competitive.

Until European governments agree on a unified armament policy, individual European countries will retain their own procurement policies. Like the United States, European countries tend to purchase major defense equipment from their domestic companies when such options exist. When national options do not exist, key European countries vary in their willingness to buy major U.S. weapon systems. For example, the United Kingdom and the Netherlands have often selected U.S. products over European products, while France has only purchased major U.S. defense items when a comparable French or European option was not available.

Transatlantic industrial partnerships appear to be evolving more readily than transatlantic cooperative programs that are led by governments. U.S. defense companies have established these transatlantic partnerships largely to maintain market access in Europe. U.S. defense company officials say they cannot export major defense items to Europe without involving European defense companies in the production of those items. Some U.S. defense companies are seeking long-term partnerships with European companies to develop a defense product line that will meet requirements in Europe or other defense markets. They believe such industrial interdependence can also help counter any efforts toward U.S. or European protectionism and may increase transatlantic defense trade. The U.S. government has taken several steps over the last few years to improve defense trade and transatlantic cooperation, but some observers point to practical and cultural impediments that affect U.S.-European cooperation on major weapon programs.

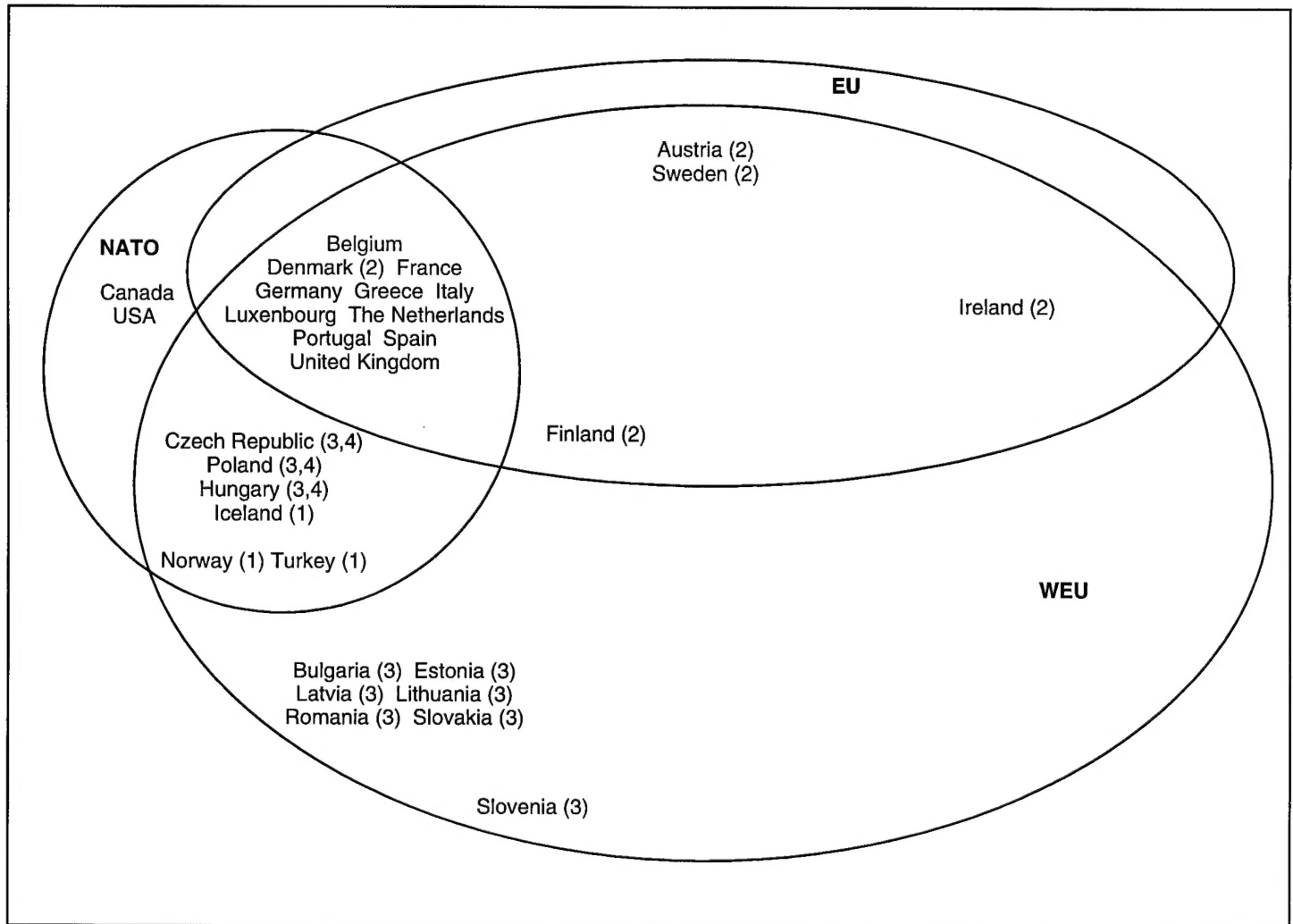
Europe Has Taken Steps to Integrate Its Defense Industry, but Progress Is Slow

European governments have made slow gradual progress in developing and implementing unified armament initiatives. These initiatives are slow to evolve because the individual European nations often have conflicting goals and views on implementing procedures and a reluctance to yield national sovereignty. In addition, the various European defense organizations do not include all of the same member countries, making it difficult to establish a pan-European armament policy.

European officials see the formation of a more unified European defense market as crucial to the survival of their defense industries as well as their ability to maintain an independent foreign and security policy. Individual national markets are seen as too small to support an efficient industry, particularly in light of declining defense budgets. At the same time, mergers and consolidations of U.S. defense companies are generating concern about the long-term competitiveness of a smaller, fragmented European defense industry.

In the past, European governments made several attempts to integrate the European defense market using a variety of organizations. The Western European Union (WEU), the European Union, and NATO are among the institutions composed of different member nations that have addressed European armament policy issues (see fig. 1). For example, in 1976, the defense ministers of the European NATO nations established the Independent European Program Group as a forum for armament cooperation. This group operated without a legal charter, and its decisions were not binding among the member nations. In 1992, the European defense ministers decided that the group's functions should be transferred to WEU, and the Western European Armaments Group was later created as the forum within WEU for armament cooperation.

Figure 1: Organizations Addressing European Armament Policy Issues



EU: European Union
 NATO: North Atlantic Treaty Organization
 WEU: Western European Union

Notes:

- (1) Associate Members of WEU
- (2) Observers of WEU
- (3) Associate Partners of WEU
- (4) Invited to begin accession negotiations with NATO

In 1991, WEU³ called for an examination of opportunities to enhance armament cooperation with the goal of creating a European armaments agency. WEU declared that it would develop as the defense component of the European Union and would formulate a common European defense policy. It also agreed to strengthen the European pillar within NATO. Under WEU, the Western European Armaments Group studied development of an armaments agency that would undertake procurement on behalf of member nations, but agreement could not be reached on the procurement procedures such an agency would follow. Appendix I is a chronology of key events associated with the development of an integrated European defense market.

Two Armament Agencies Created

In 1996, two new armament agencies were formed. OCCAR⁴ was created as a joint management organization for France, Germany, Italy, and the United Kingdom, and the Western European Armaments Organization (WEAO) was created as a subsidiary body of WEU. As shown in table 1, the two agencies are separate entities with different functions.

³WEU, which was established in 1955, serves a unique role between the European Union and NATO in addressing defense and security matters since it is the only European organization that can carry out military operations.

⁴OCCAR is the French acronym for Organisme Conjoint de Coopération en Matière d'Armement.

Table 1: Selected Characteristics of OCCAR and WEAO

	OCCAR	WEAO
Principles/goals	<ul style="list-style-type: none"> • Consolidate program management. • Coordinate long-term requirements and develop a common investment policy. • Improve European industrial base competitiveness. • Replace the program specific "juste retour" concept (work share in proportion to funds contributed) with an equitable balance over multiple programs and years. • Open membership to European countries that accept these principles and plan to participate in a major cooperative program. • Give preference to equipment to whose development a country has contributed within OCCAR. 	Promote European armament cooperation, strengthen the European defense technology base and create a European defense market. Offer an appropriate legal framework for a future European armament agency.
Programs to be administered	Milan and Hot antitank missile systems, Roland surface-to-air missile system, Tiger combat helicopter, and Brevel surveillance and reconnaissance drone program.	Existing defense research and technology projects.
Membership	France, Germany, Italy, and the United Kingdom.	Belgium, Denmark, France, Germany, Greece, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Turkey, and the United Kingdom.
Organizational status	A management organization located in Bonn, Germany, with no legal charter to administer contracts.	A WEU subsidiary located in Brussels, Belgium, with legal authority to administer contracts.

Source: Our analysis of OCCAR and WEU documents.

OCCAR was created as a result of French and German dissatisfaction with the lack of progress WEU was making in establishing a European armaments agency. Joined by Italy and the United Kingdom, the four

nations agreed on November 12, 1996, to form OCCAR as a management organization for joint programs involving two or more member nations. OCCAR's goals are to create greater efficiency in program management and facilitate emergence of a more unified market.

Although press accounts raised concerns that OCCAR member countries would give preference to European products, no such preference was included in OCCAR's procurement principles. Instead, it was agreed that an OCCAR member would give preference to procuring equipment that it helped to develop. In establishing OCCAR, the Defense ministers of the member countries agreed that OCCAR was to have a competitive procurement policy. Competition is to be open to all 13 member countries of the Western European Armaments Group. Other countries, including the United States, will be invited to compete when OCCAR program participants unanimously agree to open competitions to these countries based on reciprocity. OCCAR officials have indicated that procedures for implementing the competition policy, including criteria for evaluating reciprocity, have not yet been defined. According to some U.S. government and industry officials, issues to consider will include whether U.S. companies will be excluded from OCCAR procurement or whether OCCAR procurement policy will be consistent with the reciprocal trade agreements between member countries and the United States.

OCCAR's impact on the European defense market will largely depend on the number of programs that it manages. OCCAR members are discussing integrating additional programs⁵ in the future but are expected to only administer joint programs involving participating nations, thereby excluding transatlantic, NATO, or European cooperative programs involving non-OCCAR nations. Some European nations, such as France and Germany, are committed to undertaking new programs on a cooperative basis. While intra-European cooperation is not new, French Ministry of Defense officials have indicated that this represents a change for France because they no longer intend to develop a wide range of weapon programs on their own.

On November 19, 1996, a week after OCCAR was created, the WEU Ministerial Council established WEAO to improve coordination of collaborative defense research projects by creating a single contracting entity. As a WEU subsidiary body, WEAO has legal authority to administer contracts, unlike OCCAR, which operates without a legal charter and has no

⁵These programs include a range of products, including a counter battery radar, armored vehicles, an antiship weapon system, a satellite communication system, an observation satellite, surface-to-air missiles, and a self-propelled howitzer.

authority to sign contracts for the programs it is to administer. WEAO's initial task is to manage the Western European Armaments Group's research and technology activities, while OCCAR is to manage the development and procurement of weapon systems. The WEAO executive body has responsibility for soliciting and evaluating bids and awarding contracts for common research activities. This single contracting entity eliminated the need to administer contracts through the different national contracting authorities. According to WEAO documentation, the organization was intentionally designed to allow it to evolve into a European armaments agency. However, it may take several years before the effect of OCCAR and WEAO procurement policies can be fully assessed. Some European government officials also told us that OCCAR's ability to centrally administer contracts is curtailed until OCCAR obtains legal authority.

U.S. government and industry officials are watching to see whether OCCAR and other initiatives are fostering political pressure and tendencies toward pan-European exclusivity. As membership of the various European organizations expands, pressure to buy European defense equipment may increase. For example, according to some industry officials, the new European members of NATO are already being encouraged by some Western European governments to buy European defense products to ease their entry into other European organizations.

European Defense Industry Begins to Restructure

While European government initiatives appear to be making slow, gradual progress, the European defense industry is attempting to consolidate and restructure through national and cross-border mergers, acquisitions, joint ventures, and consortia. European government and industry observers have noted that European defense industry is reacting to pressures from rapid U.S. defense industry consolidation, tighter defense budgets, and stronger competition in the global defense market. Even with such pressures, other observers have noted that European defense companies are consolidating at a slower pace than U.S. defense companies.

The combined defense expenditures of Western Europe are about 60 percent of the U.S. defense budget, but Western Europe has two to three times more suppliers, according to a 1997 Merrill Lynch study.⁶ For example, the United States will have two major suppliers in the military aircraft sector (once proposed mergers are approved), while six European nations each have at least one major supplier of military combat aircraft.

⁶Barnaby Wiener, British Aerospace, Merrill Lynch, Pierce, Fenner and Smith Limited (Mar. 1997).

In terms of defense revenues, U.S. defense companies tend to outpace European defense companies. Among the world's top 10 arms producing companies in 1994, 8 were U.S. companies and 2 were European companies.

While economic pressures to consolidate exist, European defense companies face several obstacles, according to European government and industry officials. For example, national governments, which greatly influence the defense industry and often regard their defense companies as sovereign assets, may not want a cross-border consolidation to occur because it could reduce the national defense industrial base or make it too specialized. National governments further impede defense industrial integration by establishing different defense equipment requirements. Complex ownership structures also make cross-border mergers difficult because many of the larger European defense companies are state-owned or part of larger conglomerates.

Restructuring Within National Borders

To varying degrees, defense industry restructuring has occurred within the borders of major European defense producing nations, including France, Germany, Italy, and the United Kingdom. In France, Thomson CSF and Aerospatiale formed a company, Sextant Avionique, that regrouped and merged their avionics and flight electronics activities. The French government initiated discussions in 1996 about the merger of the aviation companies Aerospatiale and Dassault, but negotiations are ongoing. In Germany, restructuring has primarily occurred in the aerospace sector. In 1995, Deutsche Aerospace became Daimler-Benz Aerospace, which includes about 80 percent of German industrial capabilities in aerospace. In Italy, by 1995 Finmeccanica had gained control of about three-quarters of the Italian defense industry, including Italy's major helicopter manufacturer Agusta and aircraft manufacturer Alenia. In the United Kingdom, a number of mergers and acquisitions have occurred. For example, GKN purchased the helicopter manufacturer Westland and GEC purchased the military vehicle and shipbuilder VSEL in 1994.

Restructuring Across Borders

European companies have long partnered on cooperative armament programs for the development and production of large complex weapon systems in Europe. Often, a central management company has been created to manage the relationship between partners. For example, major aerospace companies from the United Kingdom, Germany, Italy, and Spain have created a consortium to work on the Eurofighter 2000 program. Another cooperative venture is the development of the European military transport aircraft known as the Future Large Aircraft. Companies from a

number of European nations are forming a joint venture company for the development and production of this aircraft. Project based joint ventures are typically industry led, but they are established with the consent of the governments involved. (See table 2 for examples of European defense company cooperative business activities for major weapon programs.)

Table 2: Examples of European Defense Company Transnational Cooperative Activities

Joint company	Company participants and percentage shareholding^a	Countries involved	Product
Airbus Military Company	Aerospatiale (37.9%), Daimler-Benz Aerospace (37.9%), British Aerospace (20%), CASA (4.2%), Alenia (Associate Member)	France, Germany, Italy, Spain, and the United Kingdom	Future Large Aircraft (planned)
Eurocopter Holding	Aerospatiale (60%), Daimler-Benz Aerospace (40%)	France and Germany	Tiger helicopter and various military and civilian helicopters
Eurodrone	Matra Hachette (50%), STN Atlas Elektronik (50%)	France and Germany	Brevel surveillance and reconnaissance drone
Eurofighter Jagdflugzeug	Daimler-Benz Aerospace (30%), Alenia (19.5%), British Aerospace (37.5%), CASA (13%)	Germany, Italy, Spain, and the United Kingdom	Eurofighter 2000
Eurojet Turbo	MTU (33%), Fiat Avio (21%), Industria de Turbo Propulsores (13%), Rolls Royce (33%)	Germany, Italy, Spain, and the United Kingdom	Turbo jet engines for the Eurofighter 2000
Euromissile	Aerospatiale (50%), Daimler-Benz Aerospace (50%)	France and Germany	Milan and Hot antitank missiles and Roland air defense missile
European Helicopter Industries	Agusta (50%), GKN Westland Helicopters (50%)	Italy and the United Kingdom	EH-101 helicopter
Eurosam	Thomson-CSF (33.3%), Aerospatiale (33.3%), Alenia (33.3%)	France and Italy	Future surface-to-air family of missiles

(continued)

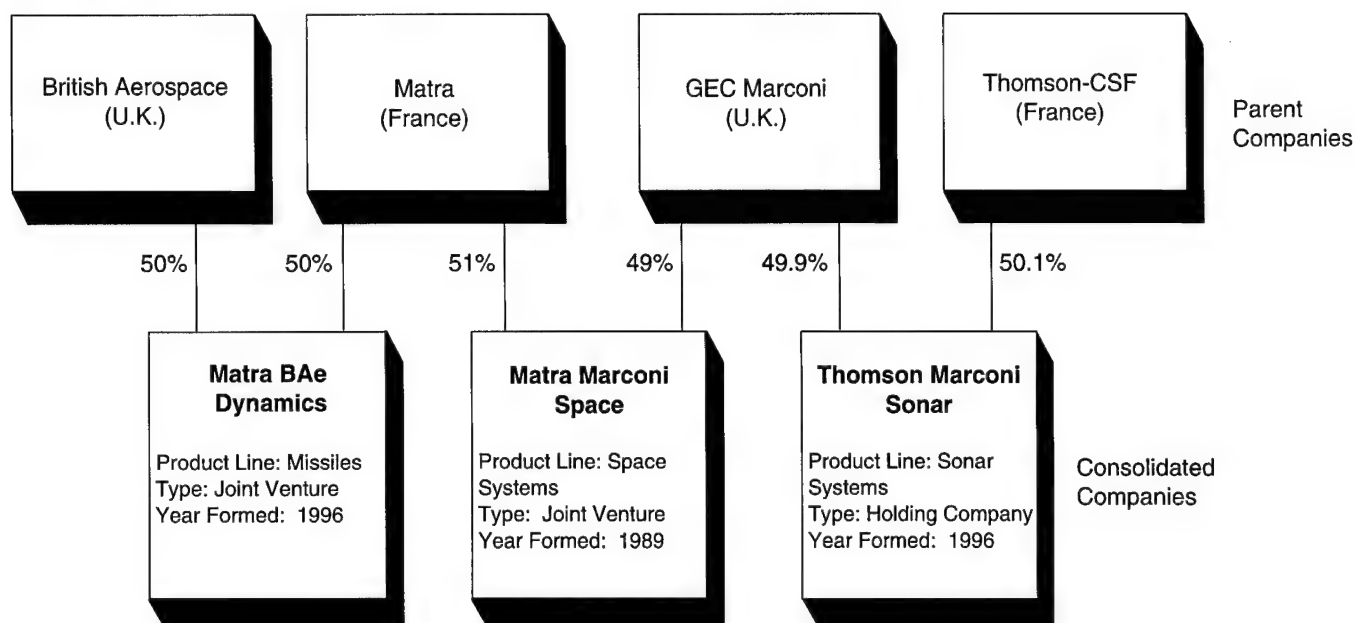
Joint company	Company participants and percentage shareholding ^a	Countries involved	Product
GTK/MRAV/VBCI	Two competing consortium: ^b (1) GKN Defense, Krauss-Maffei Wehrtechnik, Giat Industries, Wegmann & Co., MaK System (2) Henschel Wehrtechnik, Alvis, Vickers Defense Systems, Panhard & Lavassar, KUKA Wehrtechnik	France, Germany, and the United Kingdom	Family of wheeled armored vehicles
Horizon International Joint Venture	Direction des Constructions Navales (33.3%), Fincantieri (33.3%), GEC-Marconi Naval Systems (33.3%)	France, Italy, and the United Kingdom	Horizon frigate
NH Industries	Eurocopter (66.4%), Fokker Aerostructures (6.7%), Agusta (26.9%)	France, Germany, Italy, and the Netherlands	NH-90 helicopter
Panavia Aircraft	Daimler-Benz Aerospace (42.5%), British Aerospace (42.5%), Alenia (15%)	Germany, Italy, and the United Kingdom	Tornado combat aircraft

^aCompany participants and shareholdings obtained from Forecast International.

^bData on shareholdings are not available.

Although most cross-border industry cooperation is project specific, European defense companies are also acquiring companies or establishing joint ventures or cross-share holdings that are not tied to a particular program. Some cross-border European consolidation has occurred in missiles, defense electronics, and space systems. For example, in 1996, Matra (France) and British Aerospace (United Kingdom) merged their missile activities to form Matra BAe Dynamics. Both companies retained a 50-percent share in the joint venture, but they have a single management structure and a plan to gradually integrate their missile manufacturing facilities. Figure 2 highlights some examples of consolidation in specific defense sectors.

Figure 2: Examples of European Defense Company Cross-Border Consolidation



Key European Countries Vary in Their Willingness to Purchase Major U.S. Defense Items

Despite attempts to develop a unified European armament policy, individual European governments still retain their own defense procurement policies. Key European countries,⁷ including France, Germany, Italy, the Netherlands, and the United Kingdom, vary in their willingness to purchase major U.S. defense equipment. These countries have been involved in efforts to form a unified European defense market, which some observers believe may lead to excluding U.S. defense companies from participating in that market. However, U.S. defense companies continue to sell significant defense equipment to certain European countries in certain product lines.

Europe has a large, diverse defense industrial base on which key European nations rely for purchases of major defense equipment. As in the United States, these European countries purchase the majority of their defense equipment from national sources. For example, the United Kingdom aims to competitively award about three-quarters of its defense contracts, with U.K. companies winning at least 90 percent of the

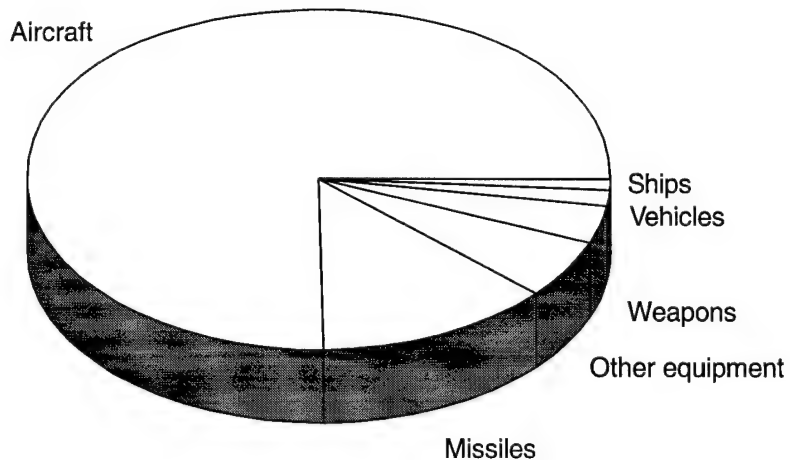
⁷France, Germany, and the United Kingdom have the largest defense budgets in Europe and their defense industries comprise 85 percent of European defense production. Italy and the Netherlands are also significant defense producers and buyers of defense equipment.

contracts over the past several years. According to French Ministry of Defense officials, imports represented only 2 percent of France's total defense procurements over the past 5 years. Germany and Italy each produced at least 80 percent of their national requirements for military equipment over the past several years. Despite its relatively small size, the Dutch defense industry supplied the majority of defense items to the Netherlands.

Notwithstanding European preference for domestically developed weapons, U.S. defense companies have sold a significant amount of weapons to Western European countries either directly or through the U.S. government's Foreign Military Sales program. These sales tended to be concentrated in certain countries and products. U.S. foreign military sales⁸ of defense equipment to Europe accounted for about \$20 billion from 1992 to 1996. Europe was the second largest purchaser of U.S. defense items based on arms delivery data, following the Middle East. The leading European purchasers of U.S. defense equipment were Turkey, Finland, Greece, Switzerland, the Netherlands, and the United Kingdom. U.S. defense companies had greater success in selling aircraft and missiles to Western Europe than they did for tanks and ships. Of the almost \$20 billion of U.S. foreign military sales, about \$15 billion, or 75 percent, was for sales of military aircraft, aircraft spares, and aircraft modifications. About \$3 billion, or 13 percent of total equipment sales, was for sales of missiles. Ships and military vehicles accounted for \$552 million, or less than 3 percent of the total U.S. defense equipment sales. Figure 3 shows U.S. defense equipment sales to Western Europe by major weapon categories. According to U.S. defense company officials, sales of military aircraft to Europe are expected to be important in future competitions, particularly in the emerging defense markets in central Europe. Competition between major U.S. and European defense companies for aircraft sales in these markets is expected to be intense.

⁸Only data on sales made through the Foreign Military Sales program were available by weapons category. Direct commercial sales data, which is tracked by the Department of State through export licenses, were not organized by weapon categories. However, we reviewed congressional notification records for direct commercial sales over \$14 million for the last 5 years to supplement our analysis of foreign military sales data. While direct commercial sales amounts can be significant for certain countries that prefer this purchasing method, exports sold through the Foreign Military Sales program still make up the majority of U.S. defense export sales.

Figure 3: U.S. Defense Equipment Sales to Western Europe by Major Weapon Categories



United Kingdom and the Netherlands

U.S. defense companies varied in their success in winning the major European defense competitions that were open to foreign bidders. The Netherlands and the United Kingdom have bought major U.S. weapon systems over the last 5 years, even when European options were available. The United States is the largest supplier of defense imports to both the Netherlands and the United Kingdom. Both of these countries have stated open competition policies that seek the best defense equipment for the best value. In the major defense competitions in these countries in which U.S. companies won, U.S. industry and government officials stated that the factors that contributed to the success included the uniqueness and technical sophistication of the U.S. systems, industrial participation opportunities offered to local companies, and no domestically developed product was in the competition. For example, in the sale of the U.S. Apache helicopter to the Netherlands and the United Kingdom, there was no competing domestically developed national option, the product was technically sophisticated, and significant industrial participation was offered to domestic defense companies.

In the major defense competitions in which U.S. companies competed in the United Kingdom over the last 5 years, the U.K. government tended to choose a domestically developed product when one existed. In some cases, these products contained significant U.S. content. For example, in the competition for the U.K. Replacement Maritime Patrol Aircraft, the two

U.S. competing products lost to a British Aerospace developed product, the upgraded NIMROD aircraft. This British Aerospace product, however, contained significant U.S. content with major components coming from such companies as Boeing. In the Conventionally Armed Standoff Missile competition, Matra British Aerospace Dynamics' Stormshadow (a U.K.-French developed option) won. In this case, the competing U.S. products were competitively priced, met the technical requirements, and would have provided significant opportunities for U.K. industrial participation. Table 3 provides details on some U.K. major procurements in which U.S. defense companies competed.

Table 3: U.K. Defense Procurement Policy and Selected Procurements

Major Defense Competitions In Which U.S. Companies Participated			
Defense item	Year awarded	Competitors	Outcome^a
Attack helicopter	1995	(1) Apache (Westland, McDonnell Douglas) (2) Cobra-Venom (GEC-Marconi, Bell Textron) (3) Tiger (British Aerospace, Eurocopter)	Westland/McDonnell Douglas team won. Contributing factors were the technical capability of the product, company partnership, and the industrial participation package offered.
Transport aircraft	1995	(1) C130J (Lockheed Martin) (2) Future Large Aircraft (Airbus Military Company)	Lockheed was selected. It had the only existing product in the competition. The Future Large Aircraft has yet to be developed.
Transport helicopter	1995	(1) Chinook CH-47 (Boeing) (2) EH-101 (Westland, Agusta)	The United Kingdom bought 22 helicopters from the U.K.-Italian joint venture that produces the EH-101 and 14 Chinook helicopters from Boeing.
Air-launched anti-armor weapon	1996	(1) Brimstone (GEC Marconi) (2) JSOW (Texas Instruments) (3) Typhoon (British Aerospace) (4) SWARM (Hunting Aviation)	GEC Marconi won with a low cost, technically competitive bid. The company spent several years developing a product to meet the U.K. requirement. Rockwell is a subcontractor to GEC Marconi.
Conventionally Armed Standoff Missile	1996	(1) Stormshadow (Matra British Aerospace Dynamics) (2) Tomahawk (Hughes) (3) SLAM (McDonnell Douglas) (4) JSOW (Texas Instruments) (5) Pegasus (GEC Marconi) (6) Taurus (DASA) (7) Popeye (Rafael Armaments)	Matra British Aerospace Dynamics won. This British/French joint venture company had a competitive product that they will jointly produce.
Replacement Maritime Patrol Aircraft	1996	(1) Nimrod 2000 (British Aerospace) (2) Atlantique III (Dassault Aviation) (3) P3 Orion 2000 (Lockheed Martin) (4) P3 Upgrade (Loral)	British Aerospace won with its low-cost domestically developed product. Boeing will provide the mission suite and perform the avionics integration work.

The U.K.'s Defense Procurement Policy: The policy is to aim for best value for money—which means taking a commercial approach to procurement by using competition. Industrial participation packages are encouraged from non-WEU countries, and on a case-by-case basis from WEU partners on all large purchases.

^aThe factors that contributed to the outcome of these competitions were those identified by U.S. industry and government officials.

France

France has purchased major U.S. defense weapon systems when no French or European option is available. In contrast to the Netherlands and the United Kingdom, the French defense procurement policy has been to first buy equipment from French sources, then to pursue European cooperative solutions, and lastly to import a non-European item. Recently, French armament policy has put primary emphasis on European cooperative programs, recognizing that it will not be economical to

develop major systems alone in the future. The procurement policy reflects France's goal to retain a defense industrial base and maintain autonomy in national security matters. As illustrated in table 4, the French government made two significant purchases from the United States in 1995 when it was not economical for French companies to produce comparable equipment or when it would have taken too long to develop.

Table 4: French Defense Procurement Policy and Selected Procurements

Recent Major Procurements of U.S. Defense Equipment			
Defense item	Year purchased	Company	Reasons for purchase ^a
KC-135 tanker aircraft	1995	Boeing	The European Airbus consortium offered the only other option, but it lacked the range, duration, and payload of the KC-135, and would have taken 5 to 10 years to build.
E-2C Hawkeye Airborne Early Warning Aircraft	1995	Northrop Grumman	No other U.S. or European companies produced this type of specialized aircraft.

France's Defense Procurement Policy: The policy is to buy technically sophisticated weapons from French companies or seek European cooperative solutions. France will buy non-European commercially available defense equipment if a national or European program cannot fill a requirement. Significant offsets are required on non-European purchases.

^aThe factors that contributed to the outcome of these competitions were those identified by U.S. industry and government officials.

Germany and Italy

Germany and Italy have made limited purchases of U.S. defense equipment in recent years because of significantly reduced defense procurement budgets and commitments to European cooperative projects. Both countries now have an open competition defense procurement policy and buy a mixture of U.S. and European products. The largest share of these countries' defense imports is supplied by the United States. In recent major defense equipment purchases from the United States, both Germany and Italy reduced quantities to reserve a portion of their procurement funding for European cooperative solutions. For example, Italy purchased the U.S. C-130J transport aircraft but continued to provide funding for a cooperative European transport aircraft program. As in the other European countries, Germany and Italy encourage U.S. companies to provide opportunities for local industrial participation when selling defense equipment. Table 5 highlights German defense procurement policy and a selected major procurement.

Table 5: German Defense Procurement Policy and Selected Procurement**Recent Major Procurement of U.S. Defense Equipment^a**

Defense item	Year purchased	Company	Reasons for purchase
Advance Medium Range Air-to-Air Missile (AMRAAM)	1995	Hughes	No other option existed that met military requirements, but quantity purchased was reduced to have funds available for a future European alternative.

Germany's Defense Procurement Policy: The policy is to have open competition on most major defense equipment purchases, with a commitment to European cooperative solutions. Recent significant reductions in the defense procurement budget allow limited funds that are primarily spent on upgrades and maintenance of existing defense equipment.

^aAccording to German Ministry of Defense officials, the German government has not purchased many major defense end items in the last 5 years. Its defense equipment spending has primarily consisted of modernization of existing defense equipment or coproduction programs.

U.S. Industry Is Taking the Lead in Forming Transatlantic Ties

As European nations work toward greater armament cooperation, competition for sales in Europe is likely to increase. To mitigate potential protectionism and negative effects on U.S.-European defense trade, both the U.S. defense industry and government have taken steps to improve transatlantic cooperation. U.S. defense companies are taking the lead in forming transatlantic ties to gain access to the European market. The U.S. government is also seeking opportunities to form transatlantic partnerships with its European allies on defense equipment development and production, but some observers point to practical and cultural impediments that affect the extent of such cooperation.

U.S. Companies Form Industrial Partnerships With European Industry to Sell Defense Equipment

U.S. defense companies are forming industrial partnerships with European companies to sell defense equipment to Europe because of the need to increase international sales, satisfy offset obligations, and maintain market access. Most of these partnerships are formed to bid on a particular weapon competition. Some, however, are emerging to sell products to worldwide markets.

According to U.S. defense companies, partnering with European companies has become a necessary way of doing business in Europe. U.S. government and defense company officials have cited the importance of industrial partnerships with European companies in winning defense sales there. Many of these partnerships arose out of U.S. companies' need to fulfill offset obligations on European defense sales by providing European

companies with subcontract work.⁹ When U.S. companies had to find ways to satisfy the customary 100-percent offset obligation on defense contracts in Europe, they began to form industrial partnerships with European companies.

With the declining U.S. defense budget after the end of the Cold War, many U.S. companies began to look for ways to increase their international defense sales in Europe and elsewhere. According to some U.S. company officials, they realized that many European government buyers did not want to buy commercially available defense equipment but wanted their own companies to participate in producing weapon systems to maintain their defense industrial base. Forming industrial partnerships was the only way that U.S. companies believed they could win sales in many European countries that were trying to preserve their own defense industries. In addition, several U.S. company officials have indicated that European governments have been pressuring each other in the last several years to purchase defense equipment from European companies before considering U.S. options. These officials stated that even countries that do not have large defense industries to support were being encouraged by other European countries to purchase European defense equipment for the economic good of the European Union. U.S. company officials believe that by forming industrial partnerships with European companies, they increase their ability to win defense contracts in Europe.

U.S. defense companies form a variety of industrial partnerships with European companies, including subcontracting arrangements, joint ventures, international consortia, and teaming agreements. The various examples of each are discussed in table 6.

⁹For more information on offsets, see Military Exports: Offset Demands Continue to Grow (GAO/NSIAD-96-65, Apr. 12, 1996).

Table 6: Types of Industrial Partnerships Formed by U.S. Defense Companies

Type	Definition	Comments	Examples
Subcontracting arrangement	Company agrees to provide parts or services for another company's weapon system in a defense procurement.	U.S. prime contractors are often willing to be subcontractors to European companies to get sales in Europe.	Hughes Aircraft is a subcontractor for British Aerospace's Advanced Short Range Air-to-Air Missile program.
Joint venture/ International consortia	Two or more companies agree to work on a particular project together.	Can be formed in response to government-to-government cooperative defense programs.	As one of two competing teams, Raytheon, Hughes, Alenia, Siemens, and DASA formed a company to jointly produce the Medium Extended Air Defense System—a cooperative program between Germany, Italy, and the United States.
Teaming agreement	Agreement between companies to jointly produce and bid for a particular defense contract.	Can take many forms, including those listed above. Sometimes can extend beyond a specific competition to future sales of the item or other items.	Textron is teamed with VSEL to produce the Howitzer for the United States. Companies will also work together to sell the Howitzer to the United Kingdom.

According to some U.S. defense company officials, most of U.S. industrial partnerships with European companies, whatever the form, are to produce or market a specific defense item. Some U.S. defense companies, however, are using the partnerships to create long-term alliances and interdependencies with European companies that extend beyond one sale. For example, Lockheed Martin has formed an industrial partnership with the Italian company Alenia to convert an Italian aircraft to satisfy an emerging market for small military transport aircraft. This arrangement arose out of a transaction involving the sale of C-130J transport aircraft to Italy. Some U.S. defense company officials see the establishment of long-term industrial partnerships as a way of improving transatlantic defense trade and countering efforts toward European protectionism.

Changes to U.S. Policies Support Defense Trade and Transatlantic Cooperation

DOD has taken a number of steps over the last few years to improve defense trade and transatlantic cooperation. For example, it has revised its guidance on considering foreign suppliers in defense acquisitions and has removed some of the restrictions on buying defense equipment from overseas. In addition, senior DOD officials have shown renewed interest in international cooperative defense programs with U.S. allies in Europe and are actively seeking such opportunities. Despite some of these efforts, some observers have cautioned that a number of factors may hinder shifts in U.S.-European defense cooperative production programs on major weapons.

The following U.S. policy changes have been made that may help to improve defense trade:

- A DOD directive¹⁰ issued in March 1996 sets out a hierarchy of acquiring defense equipment that places commercially available equipment from allies and cooperative development programs with allies, ahead of a new U.S. equipment development program. According to some U.S. government and defense industry officials, many military program managers traditionally would have favored a new domestic development program when deciding how to satisfy a military requirement.
- In April 1997, the Office of the Secretary of Defense announced that DOD would favorably consider requests for transfers of software documentation to allies. In the past, such requests were often denied, which was cited by U.S. government officials as a barrier to improve defense trade and cooperation with the United States.
- In April 1997, the Under Secretary of Defense (Acquisition and Technology) waived certain buy national restrictions for countries with whom the United States had reciprocal trade agreements.¹¹ This waiver allows DOD to procure from foreign suppliers certain defense equipment that were previously restricted to domestic sources. European government officials have cited U.S. buy-national restrictions as an obstacle in the improvement of the reciprocal defense trade balance between the United States and Europe.

DOD is also seeking ways to improve international cooperative programs with European countries through ongoing working groups and a special task force under the quadrennial review. Senior DOD officials have stated that the United States should take advantage of international armaments

¹⁰DOD Directive 5000.1.

¹¹Fiscal Year 1997 Defense Authorization Act (P.L. 104-201, sec. 810, amending 10 U.S.C. sec. 2534 (d)) provided the Secretary of Defense with the authority for this waiver.

cooperation to leverage U.S. resources through cost-sharing and to improve standardization and interoperability of defense equipment with potential coalition partners.

The U.S. government has participated in numerous international defense equipment cooperation activities with European countries, including research and development programs, data exchange agreements, and engineer and scientist exchanges, but these activities only occasionally resulted in cooperative production programs. More recently, senior DOD officials have provided increased attention to armaments cooperation with U.S. allies. In 1993, DOD established the Armaments Cooperation Steering Committee to improve cooperative programs. In its ongoing efforts, the Steering Committee established several International Cooperative Opportunities Groups in 1995 to address specific issues in armaments cooperation. In addition, the 1997 Quadrennial Defense Review to identify military modernization needs included an international cooperation task force to determine which defense technology areas the United States could collaborate on with France, Germany, and the United Kingdom. In March 1997, the Secretary of Defense signed a memorandum stating that "it is DOD policy that we utilize international armaments cooperation to the maximum extent feasible."

The U.S. government has a few ongoing cooperative development programs for major weapon systems, but most cooperative programs are at the technology level.¹² Some observers indicated to us that there may be some impediments to pursuing U.S.-European defense cooperative programs on major weapon systems because (1) European procurement budgets are limited compared to the U.S. budget; (2) the potential that U.S. support for a program may change with each annual budget review may cause some European governments concerns; (3) despite changes in DOD guidance, many military service program managers may be reluctant to engage in international cooperative programs due to the significant additional work that may be required and potential barriers that may arise, such as licensing and technology sharing restrictions; (4) many U.S. program managers may not consider purchasing from a foreign source due to the perceived technological superiority of U.S. weapons; and (5) European and U.S. governments have shown a desire to maintain an independent ability to provide for their national defense.

¹²As of July 1996, DOD had several hundred ongoing cooperative programs at the technology level, including cooperative research and development programs, data exchange agreements, and engineer and scientist exchanges.

Conclusions

Efforts have been made to develop a more unified European armament policy and defense industrial base. As regional unification efforts evolve, individual European nations still independently make procurement decisions, and these nations vary in their willingness to buy major U.S. weapon systems when European options exist. To maintain market access in Europe, U.S. defense companies have established transatlantic industrial partnerships. These industrial partnerships appear to be evolving more readily than transatlantic cooperative programs led by governments. Although the U.S. government has recently taken steps to improve defense trade and cooperation, some observers have indicated that practical and cultural impediments can affect transatlantic cooperation on major weapon programs.

Agency Comments

In commenting on a draft of this report, DOD concurred with the report and the Department of Commerce stated that it found the report to be accurate and had no specific comments or recommended changes. The comments from DOD and the Department of Commerce are reprinted in appendixes II and III, respectively. DOD also separately provided some technical suggestions, which we have incorporated in the text where appropriate.

Scope and Methodology

To identify European government defense integration plans and activities, we examined European Union, WEU, OCCAR, and NATO documents and publications. We developed a chronology of key events associated with the development of an integrated European defense market. We interviewed European Union, Western European Armaments Group, OCCAR, and NATO officials about European initiatives affecting trade and cooperation and their progress in meeting their goals. We also discussed these issues with officials at the U.S. mission to NATO, the U.S. mission to the European Union, and U.S. embassies in France, Germany, and the United Kingdom. We interviewed or obtained written responses from officials from six major defense companies in France, Germany, and the United Kingdom about European industry consolidation. We identified relevant information and studies about European government and industry initiatives and discussed these issues with consulting firms and European think tanks.

To assess how procurement policies of European nations affect U.S. defense companies' market access, we focused our analysis on five countries. We selected France, Germany, and the United Kingdom because they have the largest defense budgets in Europe and their defense industries comprise 85 percent of European defense production. Italy and

the Netherlands were selected because they are significant producers and buyers of defense equipment. These five countries are also current members or seeking membership in OCCAR. We interviewed officials from 13 U.S. defense companies on the basis of their roles as prime contractors and subcontractors and range of defense products sold in Europe. Most of these companies represented prime contractors. Eight of these were among the top 10 U.S. defense companies, based on fiscal year 1995 DOD prime contract awards. We also discussed the major defense competitions that U.S. companies participated in over the last 5 years and the factors that contributed to the competitions' outcome with officials from these companies and with U.S. government officials.

We discussed procurement policies with European and U.S. government officials. We met with Ministry of Defense officials in France, Germany, and the United Kingdom, as well as U.S. embassy officials in those countries. We did not conduct fieldwork in Italy or the Netherlands, but we did discuss these countries' procurement policies with officials from their embassies in Washington, D.C. We also reviewed documents describing the procurement policies and procedures of the selected countries and U.S. government assessments and cables about major defense contract awards that occurred in these countries and discussed factors affecting these procurement awards with U.S. government and industry officials. We did not review documentation on the bids or contract awards.

We collected and analyzed data on defense budgets and defense trade, including foreign military and direct commercial sales to identify buying patterns in Western Europe over the past 5 years. We only used the foreign military sales data to analyze sales by weapons category for the five countries and Western Europe. Direct commercial sales data, which are tracked by the State Department through export licenses, were not organized by weapon categories for the last 5 years. However, we reviewed congressional notification records for direct commercial sales over \$14 million for the last 5 years to supplement our analysis of foreign military sales data.

To determine actions the U.S. industry and government have taken in response to changes in the European defense environment, we interviewed defense company and U.S. government officials within DOD and the Departments of Commerce and State. With U.S. defense companies, we discussed their business strategies and the nature of the partnerships formed with European defense companies. We obtained and

analyzed recently issued DOD directives and policy memorandums on defense trade and international cooperation and discussed the effectiveness of these policies with U.S. and foreign government officials and U.S. and European defense companies.

We performed our review from January to September 1997 in accordance with generally accepted government auditing standards.

We are sending copies of this report to interested congressional committees and the Secretaries of State and Commerce. We will also make copies available to others upon request.

Please contact me at (202) 512-4181 if you have any questions concerning this report. Major contributors to this report were Karen Zuckerstein, Anne-Marie Lasowski, and John Neumann.

Sincerely yours,

A handwritten signature in black ink, reading "Katherine V. Schinasi". The signature is written in a cursive, flowing style.

Katherine V. Schinasi
Associate Director
Defense Acquisitions Issues

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Abbreviations

DOD	Department of Defense
OCCAR	Organisme Conjoint de Coopération en Matière d'Armement
NATO	North Atlantic Treaty Organization
WEAO	Western European Armaments Organization
WEU	Western European Union

Chronology of European Defense Initiatives

Date	Event
May 1955	Western European Union (WEU) was established as a result of the agreements signed in Paris in October 1954 modifying the 1948 Brussels Treaty.
Mar. 25, 1957	Treaty of Rome was signed creating the European community.
Feb. 2, 1976	The Independent European Programme Group was established to promote European cooperation in research, development, and production of defense equipment; improve transatlantic armament cooperation; and maintain a healthy European defense industrial base.
Dec. 9-10, 1991	The Treaty on European Union was signed in Maastricht but was subject to ratification. The WEU member states also met in Maastricht and invited members of the European Union to accede to WEU or become observers, and other European members of the North Atlantic Treaty Organization (NATO) to become associate members of WEU.
May 21, 1992	The Council of the WEU held its first formal meeting with NATO.
Dec. 1992	The European Defense Ministers decided to transfer the Independent European Programme Group's functions to WEU.
Nov. 1, 1993	The Maastricht Treaty was ratified and the European Community became the European Union.
Dec. 1993	French and German Ministers of Defense decided to simplify the management for joint armament research and development programs. The proposal for a Franco-German procurement agency emerged.
Jan. 10-11, 1994	A NATO summit was held, which supported developing of a European Security and Defense Identity and strengthening the European pillar of the Alliance.
Nov. 14, 1994	WEU Ministers issued the Noordwijk Declaration, endorsing a policy document containing preliminary conclusions of the formation of the Common European Defense policy.

Appendix I
Chronology of European Defense Initiatives

Date	Event
March 1996	The European Union Intergovernmental Conference, or constitutional convention, convened.
Nov. 12, 1996	The Defense Ministers of France, Germany, Italy, and the United Kingdom signed the political foundation document for the joint armaments agency <i>Organisme Conjoint de Cooperation en Matiere d'Armement</i> (OCCAR).
Nov. 19, 1996	The Western European Armaments Organization was established, creating a subsidiary body within WEU to administer research and development contracts.
Feb. 4, 1997	The four National Armaments Directors of France, Germany, Italy, and the United Kingdom met during the first meeting of the Board of Supervisors of OCCAR. The board reached decisions about OCCAR's organizational structure and programs to manage.
June 19, 1997	The European Union Intergovernmental Conference concluded. A new treaty was drafted, but little advancement was made to developing a common foreign and security policy. The treaty called for the European Union to cooperate more closely with WEU, which might be integrated in the European Union if all member nations agree.
July 3, 1997	The Board of Supervisors of OCCAR held a second meeting.

Comments From the Department of Defense



ACQUISITION AND
TECHNOLOGY

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7 OCT 1997

Ms. Katherine Schinasi
Associate Director, Defense
Acquisition Issues
National Security and International
Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Schinasi:

This is the Department of Defense response to the General Accounting Office draft report, "DEFENSE TRADE: European Initiatives to Integrate the Defense Market," dated September 16, 1997 (GAO Code 707230/OSD Case 1467). The Department concurs with the report.

Technical corrections to the report were separately provided. The Department appreciates the opportunity to comment on the draft report.

Paul J. Hoyer
Deputy Under Secretary of Defense
International & Commercial Programs



Comments From the Department of Commerce



THE SECRETARY OF COMMERCE
Washington, D.C. 20230

OCT - 2 1997

Ms. Katherine V. Schinasi
Associate Director
Defense Acquisitions Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Schinasi:

Thank you for the opportunity to comment on the General Accounting Office's draft report on European initiatives to integrate its defense industrial base. We found the report to be accurate and have no specific comments or recommended changes.

Sincerely

A handwritten signature in dark ink, appearing to read "William M. Daley", is written over a horizontal line.

William M. Daley